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ABSTRACT

Of 782 undergraduate students enrolled in either interpersonal communication or public speaking courses, the 125 students scoring high in communication apprehension were retested upon completion of the courses and analyzed for their responses to a student attitudes survey. Significantly greater numbers of the high communication apprehensive (HCA) students enrolled in the interpersonal communication course rather than the public speaking course, even when controlling for curriculum requirement as a factor in course selection. The HCA students also perceived greater threat in the public speaking course than in the interpersonal communication course. Data from pretest-posttest comparisons did not show that HCA students overcame their communication apprehension more noticeably in an interpersonal communication course than in a public speaking course. (RL)

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PUBLIC SPEAKING OR INTERPERSONAL COMMUNICATION: THE PERSPECTIVE OF THE HIGH COMMUNICATION APPREHENSION STUDENT

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This study considered the relationship of the high communication apprehensive student to the basic public speaking course and the basic interpersonal communication course. Students who experience high communication apprehension prefer interpersonal communication rather than public speaking courses; they perceive greater threat in the public speaking course than in the interpersonal communication course; nonetheless, the data do not support the assumption that they will overcome their communication apprehension more in an interpersonal communication course than in a public speaking course.

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PUBLIC SPEAKING OR INTERPERSONAL COMMUNICATION: THE PERSPECTIVE OF THE HIGH COMMUNICATION APPREHENSION STUDENT

Do high communication apprehensive students prefer interpersonal communication courses or public speaking courses at the basic course level? Do high communication apprehensive students perceive interpersonal communication course or public speaking courses as more threatening? Do high communication apprehensive students become relatively less apprehensive through the completion of a basic interpersonal communication course or through the completion of a basic public speaking course? The problem of communication apprehension has received considerable attention in the literature. Recent studies have considered the causes of communication apprehension;[1] the correlates of communication apprehension;[2] the effects of communication apprehension on small group interaction;[3] the effects of communication apprehension in later adult life with regard to housing and employment;[4] and the manner in which high communication apprehensives are perceived by others.[5] Very little attention, however, has been given to the special needs of the high communication apprehensive (HCA) student in basic speech course curriculum decisions. Nonetheless, fifteen to twenty percent of all students who enroll in basic speech communication courses can be diagnosed as high communication apprehensives.[6]

McCroskey defines the HCA person as having a generalized fear of communication regardless of context.[7] Communication apprehension appears to occur in a variety of communication contexts including public speaking contexts, interviewing contexts, small group contexts, and interpersonal communication contexts. Previous literature gives little indication of the comparative level of apprehension among the different contexts. The assumption that is made is that communication apprehension is a generalizable fear which operates without regard to communication context. Nonetheless, specific studies have focused on specific contexts in isolation, rather than on comparisons among contexts. The current study provides an initial step in developing research that compares the relative levels of communication apprehension among specific contexts.

The relative levels of apprehension are of utmost importance when a person is forced to choose between two or more contexts. Students who are high communication apprehensives withdraw from public speaking classes at a rate of about 50 to 70 percent while students who experience low or moderate communication apprehension withdraw at a rate of five to ten percent.[8]

Several communication behaviors are particularly anxiety producing for HCA students. Johnson states that an HCA person has a

phobic concern with communicative responsibility and message content. Specifically, HCA persons fear that what they say will not interest others; they show great concern over selection of topics and organization of messages; and they are preoccupied with their mannerisms and appearance. Johnson further states that reticent individuals will avoid situations with which they cannot cope by becoming more reticent.[9]

Students correctly perceive that public speaking requires anxiety producing behaviors. A speech requires that the student take the sole responsibility for the message. Further, the student knows that he is being formally and openly evaluated on topic selection, organization, delivery, and ability to interest others in his or her message. By definition, interpersonal communication classes, on the other hand, would be perceived as involving other people. While communication is still required, the communication responsibility is shared with at least one other person. Delivery, organization, and topic selection would not be perceived as the focal point of the class requirements. Thus, public speaking would be perceived as involving more of the specific behaviors that are threatening to HCA students.

When an HCA student is forced to choose between two specific communication contexts, the student is likely to do so based on his or her perception of the required communication behaviors. He or

she will probably avoid the situation which most specifically requires the behaviors he or she finds particularly threatening. A further factor affecting the student's choice would be his or her perception of his or her ability to cope with the communication behaviors required. Most HCA students would have had little experience in coping with public speaking, spending a large majority of their time learning strategies for coping with the anxiety that is confronted in interpersonal contexts. Therefore, the HCA students would most likely perceive the public speaking course as most threatening and the course with which they would have least ability and least experience to cope.

HCA students will probably choose the least threatening context and the context with which they are most familiar. We would expect that the following hypothesis would hold true:

> Given the choice, high communication apprehensive students will enroll in an interpersonal communication course rather than a public speaking course.

The choice among communication contexts may be influenced by other factors as well. Of specific importance in choosing between communication courses may be the perceived relevance of the course to the student's major or career, and the reputation of the course. However, research suggests that the perceived threat of communication

will outweigh other considerations. For example, McCroskey noted that HCA students in an individualized instruction situation avoided interaction with the instructor even when such interaction was necessary for the achievement of a passing grade.[10] Therefore, the following hypothesis is tested to ascertain the role of perceived threat, relevance, and goodness to the choice between communication contexts.

> HCA students will perceive interpersonal communication as significantly less threatening, more relevant, and better than the public speaking course.

The perception of threat involved in communication courses may also affect the amount of reduction of communication anxiety. First, self-fulfilling prophecy may affect the reduction of anxiety. HCA students perceive interpersonal communication as less threatening, therefore, they will have reduced anxiety. Second, the assignments that are made in the interpersonal course are similar to techniques suggested to reduce communication anxiety. For example, Johnson states that HCA will be reduced if students are not placed in positions where they have the sole responsibility for the communication.[11] Further, researchers suggest that an emphasis be placed on fulfilling the affection and understanding needs of the reticent by peers and by significant others.[12] A one-to-one basis accomplishes this goal most successfully. Interpersonal communication courses have more potential for providing these specific methods of apprehension

reduction. Indeed, research shows that public speaking situations can actually increase the apprehension levels of HCAs.[13] We would predict, therefore, that:

> Communication apprehension will decrease significantly more in an interpersonal course than in a public speaking course.

Methodology

Subjects

An initial subject pool of 782 students from the basic speech program at Iowa State University was used. 295 of these students were enrolled in the Public Speaking course and 487 students were enrolled in the Interpersonal Communication course. Approximately 55% of the subjects were male and 45% were female; most were freshmen and sophomores (63%); and the students represented a wide cross-section of majors. There were approximately the same number of students enrolled in each section of Public Speaking as compared with each section of Interpersonal Communication (about 21 students per section), the same number of males and females in each course, and the same number of freshmen, sophomores, juniors, and seniors in each course.

All students in the subject pool were given the PRCA pre-test and the Student Attitude Survey. Students who scored beyond one standard deviation above the mean on the PRCA pre-test for the sample were classified as high communication apprehensives. 93 students in the interpersonal course and 32 students in the public speaking course were identified as HCA.

Instruments

The PRCA-College was used to assess the communication apprehension of the students. The PRCA has consistently demonstrated high reliability[14] and a recent study provides evidence for the validity of the instrument.[15] The reliability of the PRCA in this study was .91, which is similar to previous estimates of reliability.

The Student Attitude Survey was designed to elicit data relevant to the hypotheses of this study. A total of twenty-six questions were included on this instrument. The first four questions were five-foil forced multiple choice questions which concerned the student's selection of interpersonal communication or public speaking. The second four questions concerned the student's relative comfort in various communication situations and allowed the students to respond on a five-point semantic differential scale. Questions nine through seventeen consisted of nine five-point semantic differential scales on which the students recorded their attitudes toward public speaking. Questions eighteen through twenty-six consisted of nine five-point semantic differential scales on which the student responded to interpersonal communication. The first question on the survey and six of the semantic differential type scales were included for purposes of this study, the remaining nineteen questions were included in order to mask the intent of the questionnaire. The reliability of the Student Attitude Survey was found to be .84.

Procedures

The subjects were given the PRCA-College and the Student Attitude Survey at the beginning of the first regular class meeting of

the quarter. In order to minimize the influence of individual instructors and the effects of specific course work on students' expectations, the PRCA and the Survey were administered before the subjects had met with their instructors and before they had received any material relevant to the course. The subjects were instructed to complete the pertinent demographic information and their student identification numbers. The PRCA and the Student Attitude Survey were introduced as a research project of the Department of Speech an and students were assured that they could expect a measure of anonymity. The sequence in which the measures were presented was reversed for one-half of the students to control for test-order effects.

Analysis

For the purposes of this study, High Communication Apprehension was defined as a score on the PRCA-College equal to or greater than one standard deviation from the mean. This definition is comparable to that suggested by McCroskey.[16] Specifically, HCA was defined for this study as a score of 72 or greater ($x = 60.1$; s.d. = 12.1). A chi-square analysis was used as the statistical test for the first hypothesis.[17] Significance was set at $p < .05$. The three scales relevant to the second hypothesis were not known to be uni-dimensional so they were analyzed separately. A t-test was used for the comparisons with the significance level set at $p < .01$ to control for a Type I error. A t-test was also used for the third hypothesis, using an adjusted formula for unequal sample size.[18] The change in PRCA scores was computed by subtracting the post-test PRCA from the pre-test PRCA and adding a constant ($k = 100$) to avoid the computation of negative numbers. Significance was set at $p < .05$.

Results

If no preference exists, HCA students would be expected to enroll in the public speaking course and the interpersonal communication course in the same proportion as the total population. In order to test the first hypothesis, a chi-quare analysis was thus performed using expected values equal to the proportion of students enrolled in each course. The chi-square analysis indicated that a significantly greater number ($p < .01$) of HCA students enrolled in interpersonal communication than in public speaking ($X^2 = 7.66$; $P_{.01} = 6.634$; $df = 1$).

The first question on the survey was analyzed to insure that a significantly greater number of students did not enroll in public speaking because it was specifically required by their department or college, nor did a significantly greater number of students enroll in interpersonal communication because it was specifically required. The chi-square analysis indicated no such significant difference ($X^2 = .01$, $P_{.01} = 6.64$, $df = 1$). In other words, while some departments require or strongly suggest one course rather than the other, and while some students enroll in one course rather than the other because of such restrictions, there is no significant difference in the number of students who enroll in public speaking because of this rationale. We can therefore reject the explanation that differences in the number of HCAs enrolled in interpersonal communication vs. public speaking was due to departmental or college requirements.

The second hypothesis was analyzed by means of a t-test for each scale. The results of the analysis are presented in Table 1.

Place Table 1 here

The table shows that the only significant difference in attitude toward the two courses occurs on the threatening/not threatening scale.

The third hypothesis was analyzed by a t-test of the mean changes in PRCA scores. The number of subjects for the third hypothesis dropped approximately 50% from the initial number of HCA's enrolled in the courses. The attrition was due to students dropping the course, failing to complete the post-test PRCA, and/or incorrect completion of the PRCA post-test. In order to insure that a similar number of students dropped each course, a chi-square analysis was performed. It was found that no significant difference in the number of students who failed to complete either course occurred ($X^2 = .40$, $P_{.05} = 4.71$, $df = 1$). The t-test used to analyze the third hypothesis showed no significant difference between the two groups as indicated in Table 2. A closer analysis of the scores indicated that the difference in the sample variances was too great to render the comparison meaningful.[19]

Place Table 2 here

Discussion

This study was an initial attempt at dealing with communication apprehension across two communication contexts. It considered the

preferences and perceptions of high communication apprehensive students toward interpersonal communication and public speaking classes and the relative effects of these classes on the apprehension level of the high communication apprehensive student. High communication apprehensive students avoided the public speaking course when an alternative interpersonal communication course was available: Significantly more HCA's chose the interpersonal communication course. The trait approach to communication anxiety suggests that persons with high communication anxiety will perceive all communication situations to be threatening. The support of this hypothesis may suggest that public speaking is considered more threatening than other communication situations by persons with high communication anxiety. Additional factors which could account for this preference, such as sex and past speech experience should be considered in future investigations. Research has suggested a correlation between these factors and communication apprehension. In addition, if threat is found to be the significant discriminator in selection of courses, research should consider the causes of this perception.

An attempt was made in the study to identify three possible factors that might account for the difference in course preferences. The factors considered were the perceived relevance of the course, the perceived threat of the course, and the perceived goodness of the course by the HCA student. Of these three factors, only perceived threat was significantly different for the two courses. This finding lends credence to the interpretation of the first hypothesis made above. HCA's appear to choose interpersonal communication rather than

public speaking courses because of the difference in perceived threat between the two communication situations. The rationale for the difference in perceived threat is probably due to the public scrutiny aspect of public speaking coupled with the perception of having the sole responsibility for the success or failure of communication. Future research might focus on identifying other causes of the perceived threat of public speaking.

No difference in communication apprehension reduction was found between the two courses, but the lack of homogeneity of variance, as discussed above, does not allow us to draw any conclusions from this finding. While we were unable to demonstrate that no difference in communication apprehension reduction occurred between the two courses--nor that a difference did exist--we would offer two possible explanations for future researchers who find no difference in the reduction of communication apprehension between two different basic courses. The first explanation relates to the methodology of the present study; while the second explanation relates to the methodology, as well as the nature of, communication anxiety.

First, the HCA student was operationally defined as any student who had a PRCA score greater than, or equal to, one standard deviation from the mean for the given population. Since this study used only those scores that represent an extreme population, principles of regression toward the mean may account in part for the equal reduction of scores on the PRCA.

Second, the student's interpretation of the PRCA may have varied from the pre-test to the post-test. On the pre-test, the student may have been considering communication, in general, or on the expected, but unknown, requirements of the course in which he or she was enrolled. On the post-test, the student may have been reacting to the specific course that he or she had just completed; that is, the student was reacting to a specific known set of communication behaviors, communication assignments, and communication competencies. If this is the case, the student who had successfully completed the course requirements would indicate reduced communication anxiety on the PRCA. In essence, the post-test may have been merely measuring communication anxiety in a specific situation which suggested specific behaviors, assignments, competencies, and success in meeting those requirements.

In addition, communication anxiety may be a manifestation of imagined threat rather than anxiety over actual behavior. After a person has experienced the communication situation, his or her fear concerning the situation may decrease. The pre-test measured communication anxiety as a pre-behavior phenomenon. On the post-test PRCA, students in both classes had engaged in communication behavior and felt that they could cope with the situation more successfully. Reduction of communication anxiety may not be generalizable to other situations in which the required communication behaviors are unknown. This explanation is supported by the systematic desensitization studies which attempt to decrease the pre-communication anxiety and therefore show a decrease in actual communication anxiety.[21] Further studies of the lasting effects of communication anxiety reduction are needed.

Students who experience high communication anxiety prefer interpersonal communication rather than public speaking courses; they perceive greater threat in the public speaking course than in the interpersonal communication course; nonetheless, the data does not support the assumption that they will overcome their communication anxiety more in an interpersonal communication course than in a public speaking course. Sensitive communication educators must consider the preferences and perceptions of courses by students who demonstrate high communication anxiety, as well as the effects of those courses on the student's anxiety levels.

This study has implications for future research in the basic course. The design did not allow us to investigate the preferences, perceptions, and improvement of low communication apprehensive or moderate communication apprehensive students. It is possible that other students respond in a similar manner to the HCA students. Future studies could determine if the preferences, perceptions, and lack of significant difference in improvement is generalizable across the entire basic course population. Such a finding could influence the current arguments concerning basic course curricula.

This study also suggests an additional research focus in the area of communication apprehension: researchers must identify relative levels of communication apprehension among various communication contexts. Second, they should identify the preferences of high communication apprehensive students for the variety of basic speech communication courses. Third, researchers must seek to identify the causes for

those preferences. Fourth, they must attempt to validate various theories of communication apprehension, including the trait vs. state controversy and the pre-communication apprehension vs. actual communication apprehension conflict. Finally, they must continue to seek methods of reducing communication apprehension in a variety of situations for a lasting period of time.

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[1]See, for example, Gerald M. Phillips and David E. Butt, "Reticence Re-Visited," Pennsylvania Speech Annual, 23(1966), 40-57 and Larry R. Wheeless, "Communication Apprehension in the Elementary School," Speech Teacher, 20(1971), 297-299 which suggest that the early childhood experiences are responsible for communication apprehension in later adult life; Gerald M. Phillips, "Reticence: Pathology of the Normal Speaker," Speech Monographs, 35(1968), 39-49 who states that a parent's attitude toward communication can result in communication apprehension in their children; Virginia P. Richmond and D. Robertson, "Communication Apprehension as a Function of Being Raised in an Urban or Rural Environment," unpublished monograph, West Virginia Community College, 1976 who demonstrate that environment has an effect in producing communication apprehension; and W. K. Ickes, "A Classical Conditional Model for 'Reticence,'" Western Speech, 35(1971), 48-55 who suggests that communication apprehension may be a learned conditioned response.

[2]See, for example, James C. McCroskey, John A. Daly, and Gail A. Sorenson, "Personality Correlates of Communication Apprehension,"

Human Communication Research, 2(1976), 376-380 and Lawrence C. Rosenfeld and Timothy G. Plax, "Personality Discriminants of Reticence," Western Speech Communication, 40(1976), 22-31 which demonstrate a positive correlation between general anxiety and a number of personality traits; Jackson R. Huntley, "An Investigation of the Relationships between Personality and Types of Instructor Criticism in the Beginning Speech-Communication Course, Ph. D. dissertation, Michigan State University, 1969 who demonstrates a positive correlation between communication apprehension and introversion; James C. McCroskey, John A. Daly, Virginia P. Richmond, and Raymond L. Falcione, "Studies of the Relationship between Communication Apprehension and Self-Esteem," Human Communication Research, 3(1977), 269-277 and Myron W. Lustig, "Verbal Reticence: A Reconceptualization and Preliminary Scale Development," paper presented to the Speech Communication Association Convention, Chicago, Illinois, 1974 which demonstrate a negative correlation between communication apprehension and self-esteem and between communication apprehension and self-acceptance; H. R. Witteman, "The Relationship of Communication Apprehension to Opinion Leadership and Innovativeness," M. A. thesis, West Virginia University, 1976 who demonstrates a negative correlation with communication apprehension and innovativeness; and Phillips who found that high communication apprehensives showed a preference for writing over speaking.

[3]See, for example, Judy Wells, "A Study of the Effects of Systematic Desensitization on the Communicative Anxiety of Individuals in Small

Groups," M. A. thesis, San Jose State College, 1970; A. N. Weiner, "Machiavellianism as a Predictor of Group Interaction and Cohesion," M. A. thesis, West Virginia University, 1973, P. R. Hamilton, "The Effect of Risk Proneness on Small Group Interaction, Communication Apprehension, and Self-Disclosure," M. S. thesis, Illinois State University, 1972, and Gail A. Sorenson and James C. McCroskey, "The Prediction of Interaction Behavior in Small Groups: Zero History vs. Intact Groups," Communication Monographs," 44(1977), 73-80 which demonstrate that high communication apprehension students talk less in a small group setting; and V. J. Wenzlaff, "The Prediction of Leadership: A Consideration of Selected Communication Variables," M. S. thesis, Illinois State University, 1972 who found that high communication apprehensive students exert less leadership in a group than do persons who are not high communication apprehensive.

[4]See, for example, John A. Daly and James C. McCroskey, "Occupational Choice and Desirability as a Function of Communication Apprehension," Journal of Counseling Psychology, 22(1975), 309-313 and Michael D. Scott, James C. McCroskey, and M. E. Sheahan, "The Development of a Self-Report Measure of Communication Apprehension in Organizational Settings," Journal of Communication, 28(1978), 104-111, which found that high communication apprehensive students prefer lower paying, lower status jobs that required less communication than higher paying, higher status jobs which required more communication; John A. Daly and S. Leth, "Communication Apprehension and the Personnel Selection Decision," paper presented at the Annual Convention of the Eastern

Communication Association, Philadelphia, 1976 who found that high communication apprehensives were less likely to be offered an employment interview or a job; Raymond L. Falcione, James C. McCroskey, and John A. Daly, "Job Satisfaction as a Function of Employees' Communication Apprehension, Self-Esteem, and Perceptions of their Immediate Supervisor," unpublished monograph, University of Maryland, 1976 who showed that communication apprehension is negatively correlated with job satisfaction; John A. Daly, James C. McCroskey, and Raymond L. Falcione, "Communication Apprehension, Supervisor Communication Receptivity and Satisfaction with Superiors," paper presented at the Annual Convention of the Eastern Communication Association, Philadelphia, 1976 who showed that high communication apprehensives are perceived less positively than low communication apprehensives by subordinates; Bruskin Associates, "What are Americans Afraid of?" The Bruskin Report, 1973, No. 53 who showed that high communication apprehensives select majors in college and occupations associated with lower income levels; and Virginia P. Richmond, "Communication Apprehension and Success in the Job Application Screening Process," unpublished monograph, West Virginia Northern Community College, 1976 who showed that high communication apprehensives are less successful in their jobs and in their relationships with coworkers.

[5]See, for example, James C. McCroskey and John A. Daly, "Teachers' Expectations of the Communication Apprehensive Child in the Elementary School," Human Communication Research, 3(1976), 67-72, Daly and Leth, James G. Quiggins, "The Effects of High and Low

Communication Apprehension on Small Group Member Credibility, Interpersonal Attraction, and Interaction," paper presented to the Speech Communication Association Convention, Chicago, 1972, James C. McCroskey, John A. Daly, Virginia P. Richmond, and Barbara G. Cox, "The Effects of Communication Apprehension on Interpersonal Attraction," Human Communication Research, 2(1975), 51-65, James C. McCroskey and Virginia P. Richmond, "The Effects of Communication Apprehension on the Perception of Peers," Western Speech Communication Journal, 40(1976), 14-21, Daly, McCroskey and Falcione, and John A. Daly, James C. McCroskey, and Virginia P. Richmond, "The Relationship between Vocal Activity and Perceptions of Communicators in Small Group Interaction," Western Speech Communication Journal, 41(1977), 175-187, who found that high communication apprehensives are perceived as less attractive, less competent, less sociable, and less extroverted than low communication apprehensives; and Thomas H. Hurt and K. Joseph, "The Impact of Communication Apprehension in the Process of Social Change," paper presented to the Eastern Communication Association Convention, New York, 1975 who found that high communication apprehensives are not perceived as opinion leaders.

[6]James C. McCroskey, "Measures of Communication-Bound Anxiety," Speech Monographs, 37(1970), 269-277.

[7]McCroskey, 1970, 270.

[8]McCroskey, 1970, cited in "Oral Communication Apprehension: A Summary of Recent Theory and Research," paper presented to the International Communication Association Convention, Berlin, Germany, 1977, 11.

Association Convention, Houston, 1975.

[9]Carl Johnson, Speech Reticence: Sounds and Silence, (Fort Collins, Colorado: Shields Publishing Company, 1973), pp. 21-34.

[10]James C. McCroskey, "Oral Communication Apprehension: A Summary of Recent Theory and Research," paper presented to the International Communication Association Convention, Berlin, 1977.

[11] Johnson, p. 32.

[12]Gordon L. Paul, Insight Vs. Desensitization in Psychotherapy: An Experiment in Anxiety Reduction, (Stanford, California: Stanford University Press, 1966), p. 93 and Phillips.

[13]McCroskey, 1977.

[14]McCroskey, 1975.

[15]James C. McCroskey, "Validity of the PRCA as an Index of Oral Communication Apprehension," Communication Monographs, 45(1978), 192-203.

[16]McCroskey, 1970.

[17]As recommended by Gene V. Glass and Julian C. Stanley, Statistical Methods in Education and Psychology, (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1970), pp. 7-10.

[18]As suggested by J. L. Bruning and D. L. Kintz, Computational Handbook of Statistics, (Glenview, Illinois: Scott Foresman, 1968), pp.

[19]The significant difference in the variance was found to be the result of an exceedingly large change made by one student in the public speaking class who scored 93 on the pre-test PRCA and 31 on the post-test PRCA.

[20]See, for example, James C. McCroskey, "The Implementation of a Large Scale Program of Systematic Desensitization for Communication Apprehension," Speech Teacher, 21(1972), 255-264 and Paul.

TABLE 1 THE ATTITUDES TOWARD PUBLIC SPEAKING AND INTERPERSONAL COMMUNICATION BY HIGH COMMUNICATION APPREHENSIVE STUDENTS

	Attitude Toward Public Speaking			Attitude Toward Interpersonal Communication			t-test
	$\bar{x}$	s^2	n	$\bar{x}$	s^2	n	
threatening/ not threatening	2.47	1.21	128	3.19	.87	124	5.625*
relevant/ not relevant	2.62	1.04	128	2.39	1.02	124	1.796
good/bad	2.79	1.03	128	2.63	.70	123	1.167

* significant at $p < .001$ $t_{.001} = 3.090$ $df = 120$

TABLE 2 REDUCTION OF COMMUNICATION APPREHENSION FOR HIGH COMMUNICATION APPREHENSIVE STUDENTS BY COURSE

	$\bar{x}$	s^2	n
Interpersonal Communication	112.78	77.05	47
Public Speaking	115.75	166.98	20

$t = .713$ $p > .05$